

Special Issue

Genetic Regulation of Neurons and Behavioral Genetics

Message from the Guest Editor

The genetic regulation of neuronal development, function, and plasticity is fundamental to the formation and operation of neural circuits that govern behavior. Advances in genomics, epigenomics, single-cell transcriptomics, genome editing, and systems neuroscience have transformed our understanding of how genetic and epigenetic mechanisms influence neuronal identity, connectivity, and activity. These discoveries have provided important insights into the biological basis of cognition, emotion, behavior, and neurodevelopmental, neurological, and psychiatric disorders. This Special Issue aims to showcase cutting-edge research and comprehensive reviews exploring the molecular and genetic mechanisms that regulate neuronal function and behavioral outcomes. Topics of interest include gene regulatory networks, neuronal development, synaptic plasticity, neuronal circuit function, gene–environment interactions, behavioral genetics, and the genetic basis of brain disorders. Studies employing innovative experimental and computational approaches are particularly encouraged.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

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